

### IN THE SPECIFICATION:

Replace the paragraph beginning at page 4, line 28 through page 5, line 24 which reads:

“The aim of the present invention...mg/d” with the following amended paragraph:

The aim of the present invention is to find a method which allows the isolation of fetal cells from maternal peripheral blood in sufficient number for reliable prenatal noninvasive genetic investigation. Standard procedures to isolate fetal NRBCs from maternal blood use density gradient centrifugation as a first step for enrichment of fetal cells. When an heterogeneous cell population is centrifuged in a continuous density gradient, whose density at the bottom is greater than the buoyant density of the different cells present in the sample, then cells will float to positions in the gradient where density of the solution is identical with that of the cell, provided the product of the time and centrifugal field exceeds a certain value. After that no further sedimentation will occur, independently of the time of centrifugation. A distinct advantage contributing to the widespread use of density gradient centrifugation is that a very large number of cells can be simultaneously fractionated. When the density distribution profile of different cell populations does overlap, their separation by density gradient centrifugation is impossible, as it is the case for NRBCs, lymphocytes and monocytes. The above mentioned aim is satisfied by modifying the density of cells present in maternal blood, more particularly that of NRBCs, lymphocytes and monocytes, and is obtained transferring maternal blood into non-physiological culture medium. When maternal blood is transferred into non-physiological culture medium, NRBCs density decreases while cell density of lymphocytes and monocytes increases. Said non-physiological culture medium is the following:

|                  |           |        |
|------------------|-----------|--------|
| pH               | 6.4-6.6   |        |
| osmolality       | 300-330   | mOsm   |
| Na <sup>+</sup>  | 150-170   | mmol/l |
| K <sup>+</sup>   | 4.5-5.5   | mmol/l |
| Cl <sup>-</sup>  | 100-115   | mmol/l |
| Ca <sup>++</sup> | 1.00-2.50 | mmol/l |
| glucose          | 400-500   | mg/dl  |
| lactate          | 10-20     | mg/dl. |

Replace the paragraph at page 9, lines 2 to 12, which reads “Immediately after, ... mg/dl” with the following amended paragraph:

Immediately after, 5 ml of an aqueous solution are added, containing citric acid 1g/125 ml, Na citrate 2.25 g/125 ml and dextran 3g/125 ml, thus obtaining the following non-physiological conditions

|            |      |              |
|------------|------|--------------|
| pH         | 6.5  |              |
| Osmolality | 320  | mOsm/l       |
| Na         | 165  | mmol/l       |
| K          | 5.35 | mmol/l       |
| Cl         | 110  | mmol/l       |
| Ca         | 1.25 | mmol/l       |
| glucose    | 500  | <u>mg/dl</u> |
| lactate    | 10   | mg/dl.       |